

REMARKS

Claims 1 through 18 are pending in the application.

The applicants and the applicants' representative sincerely appreciate the interview of August 11, which is correctly summarized in the Examiner's Interview Summary. It is believed that agreement was reached at the interview as to the differences between the cited documents and the present claimed invention (as indicated in the Examiner Interview Summary).

Claims 1 through 18 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over U.S. Patent Numbers 6,112,598 and 6,167,763.

At the outset it is noted that the '598 and '763 documents qualify as prior art under § 102(b).

It is respectfully submitted that the present claimed invention is clearly distinguishable over the '598 and '763 inventions for at least the following reasons.

The present invention, the '598 invention, and the '763 invention are all directed to minimizing bending artifacts. However, the present invention and the inventions of the '598 and '763 patents accomplish this objective by different structures. In the embodiments of the '598 and '763 inventions, the sensor chip is basically rectangular in cross section and the structure other than the sensor chip ensures that the end of the sensor chip containing the sensor is cantilevered. For example in Figure 4 of these patents, the shape of the core wire 16 varies so that the end of sensor chip 19 containing sensor M is cantilevered so that a clearance is provided. Please see the attached mark-up of Figure 4 of the '598 patent wherein the chip is shaded in solid black and the core wire is shaded in dots.

In contrast, in the present invention, the sensor chip itself is structured such that the end of the sensor chip containing the sensor is cantilevered to provide a clearance. For example, as shown in the enclosed markup of Figure 4a (wherein the chip is shaded in solid

black and the core wire is shaded in dots), the sensor chip itself includes a mounting base which allows sensor portion 36 to be cantilevered to provide a clearance.¹

Please note from a comparison of Figure 4 of the prior art with Figure 4a of the present invention that the sensor chip in the prior art (shown in solid black in both marked-up figures) completely lacks a mounting base, which, at a second end of the sensor chip, extends downwards and is adapted for mounting to the core wire such that a clearance is formed.

Independent claim 1 of the present application recites “wherein the sensor chip comprises a mounting base, which, at a second end of the sensor chip, extends downwards and is adapted for mounting to the core wire such that a clearance is formed between the first end portion and the core wire.” Independent claim 10 of the present application recites “wherein the sensor element has a mounting base, which, at a second end of the sensor element, extends downwards and is adapted for mounting to the core wire such that a clearance is formed between the first end portion and the core wire.”

These features are clearly not disclosed or suggested by the ‘598 and ‘763 patents. The ‘598 and ‘763 patents are completely missing the concept of modifying the sensor chip or element itself. For at least this reason, the present claims are clearly patentable over the ‘598 and ‘763 patents.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or

¹ The discussion herein of Figure 4 of the prior art and Figure 4a of the present invention is set forth to help explain some of the differences between the prior art and the present invention. Of course, the scope of the present invention is defined with reference to the claims, and is not limited to Figure 4a.

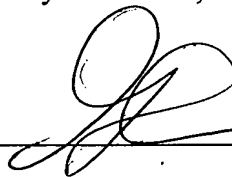
even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date: October 3, 2005

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By

A handwritten signature in black ink, appearing to be 'Glenn Law', written over a horizontal line.

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Fig.4

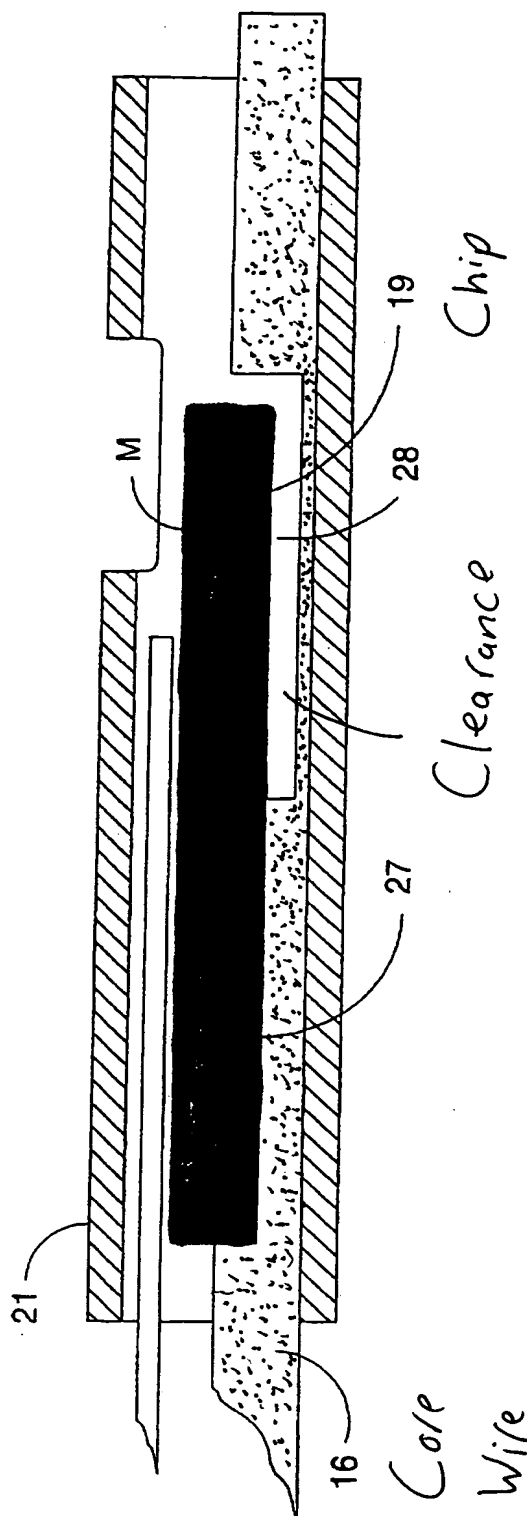


Exhibit - Not a Drawing